

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method for generating a data stream according to a binary format of a tag-based description language, comprising:
 - receiving a plurality of tag names;
 - receiving a plurality of attribute names;
 - identifying tag names from said plurality of tag names;
 - identifying attribute names from said plurality of attribute names;
 - tokenizing tag names into numeric tokens;
 - tokenizing attribute names into said numeric tokens;
 - wherein said data stream comprises of said tokenized tag names and said tokenized attribute names, and wherein said data stream further comprises binary primitive types when such primitive types were originally in binary format;
 - wherein said numeric tokens are configured to be variable-sized; and
 - wherein said numeric tokens are configured for incremental output and parsing thereby obviating a global token table at the beginning of said data stream.
- 2 - 5. (canceled)
6. (currently amended) [[A]] The method according to claim 1, wherein said tokenizing of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream.
7. (currently amended) [[A]] The method according to claim 1, wherein the tag-based description language is extensible markup language (XML).
8. (currently amended) [[A]] The method according to claim [[2]] 1, wherein the tokenizing of the tag and attribute names decreases the time elapsed parsing the data stream by a device that receives the data stream, the time being decreased relative to the parsing of a corresponding text-based format of the tag-based description language.

9. (currently amended) [[A]] The method according to claim [[2]] 1, wherein the tokenizing of the tag and attribute names decreases overhead incident to formatting data for representation according to the tag-based description language.
10. (currently amended) [[A]] The method according to claim [[2]] 1, wherein the tokenizing of the tag and attribute names decreases the size of the resulting data file formatted according to the tag-based description language.
11. (currently amended) [[A]] The computer storage medium ~~bearing~~ storing thereon computer executable instructions for carrying out the method of claim 1.
12. (currently amended) A computer storage medium ~~bearing~~ storing thereon computer executable instructions for carrying out the method of receiving a well-formed document in a text format of a tag-based description language and converting the document to a binary format via tokenization of the tag and attribute names into numeric tokens, comprising:
tokenizing said tag and attribute names into a set of numeric tokens;
wherein said tokenizing of attribute names enables values natively stored as binary data types to be inserted into a data stream;
wherein said tokenization of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives said data stream;
wherein the numeric tokens are in incrementally consumable form; and
wherein the numeric tokens are configured for incremental output and parsing thereby obviating a global token table at the beginning of said data stream.
- 13 - 14. (canceled)
15. (currently amended) [[A]] The computer readable medium according to claim 12, said receiving includes receiving a document formatted according to a text format of XML.
16. (currently amended) [[A]] The computer storage medium ~~bearing~~ storing thereon computer executable instructions for carrying out the method of assembling data into a

document according to a binary format and then parsing said document back into text format [[by]], comprising:

tokenizing [[the]] tag and attribute names into variable sized numeric tokens, wherein [[the]] said numeric tokens are in incrementally consumable form thereby obviating a global token table at the beginning of a data stream;

including in said tokenizing any binary primitives and name definition constructs;

configuring said document to be parsed into said text format;

configuring said document to be consumed in numeric token form incrementally by breaking up at least one long token of said numeric tokens into predetermined and manageable pieces; and

wherein said numeric tokens are configured to designate token types in their first series of bytes.

17 - 18. (canceled)

19. (currently amended) [[A]] The computer readable medium according to claim 16, ~~said receiving includes~~ further comprising receiving [[a]] said document that is formatted according to a text format of XML.

20. (currently amended) A computer storage medium ~~bearing~~ storing thereon computer executable instructions for carrying out the method of receiving a document formatted according to a binary format of a tag-based description language and directly parsing the data in the document for use by another element in a computer system, comprising:

receiving said document;

converting said document to a text format of the tag-based description language;

wherein said document corresponds to a data stream that comprises of tokenized tag names and tokenized attribute names, and wherein said data stream further comprises binary primitive types when such primitive types were originally in binary format;

wherein said converting comprises changing numeric variable sized tokens into said text format, wherein said tokens are configured for incremental output and parsing resulting in obviating global token tables; and

storing said converted text format in a memory.

21. (canceled)

22. (currently amended) [[A]] The computer readable medium according to claim 20,
wherein said receiving includes receiving a document formatted according to a binary format
of XML.

23 - 26. (canceled)

27. (currently amended) In a system in which a transmitting device transmits in a
streaming fashion data formatted according to a tag-based and attribute-based description
language, a method for generating a data stream according to a binary format of [[the]] said
tag-based description language and said attribute-based description language, comprising:

for each unique tag name, at the first time a tag name of the data is encountered,
tokenizing the tag name into a first numeric token and transmitting the first numeric token
and the text associated with the tag name; [[and]]

wherein said first numeric token for said tag name is variable sized;

at any time subsequent to the first time that the tag name of the data is encountered,
transmitting the first numeric token without the text;

for each unique attribute name, at the first time an attribute name of the data is
encountered, tokenizing the attribute name into a second numeric token and transmitting the
second numeric token and the text associated with the attribute name;

wherein said second numeric token for said attribute name is variable sized;

at any time subsequent to the first time that the attribute name of the data is
encountered, transmitting the second numeric token without the text;

wherein said tokenizing of attributes enables values natively stored as binary data
types to be inserted into the data stream; and

wherein said first numeric token and said second numeric token are configured for
incremental output and parsing thereby obviating any global token tables at the beginning of
said data stream.

28 - 32. (canceled)

33. (currently amended) [[A]] The method according to claim 27, wherein the tag-based description language is extensible markup language (XML).

34. (currently amended) [[A]] The method according to claim 28, wherein the tokenizing of the tag and attribute names decreases the time elapsed parsing the data stream by a device that receives the data stream, the time being decreased relative to the parsing of a corresponding text-based format of the tag-based description language.

35. (currently amended) [[A]] The method according to claim 28, wherein the tokenizing of the tag and attribute names decreases overhead incident to formatting data for representation according to the tag-based description language.

36. (currently amended) [[A]] The method according to claim 28, wherein the tokenizing of the tag and attribute names decreases the size of the resulting data file formatted according to the tag-based description language.

37. (currently amended) [[A]] The computer storage medium bearing computer executable instructions for carrying out the method of claim 27.

38 - 39. (canceled)